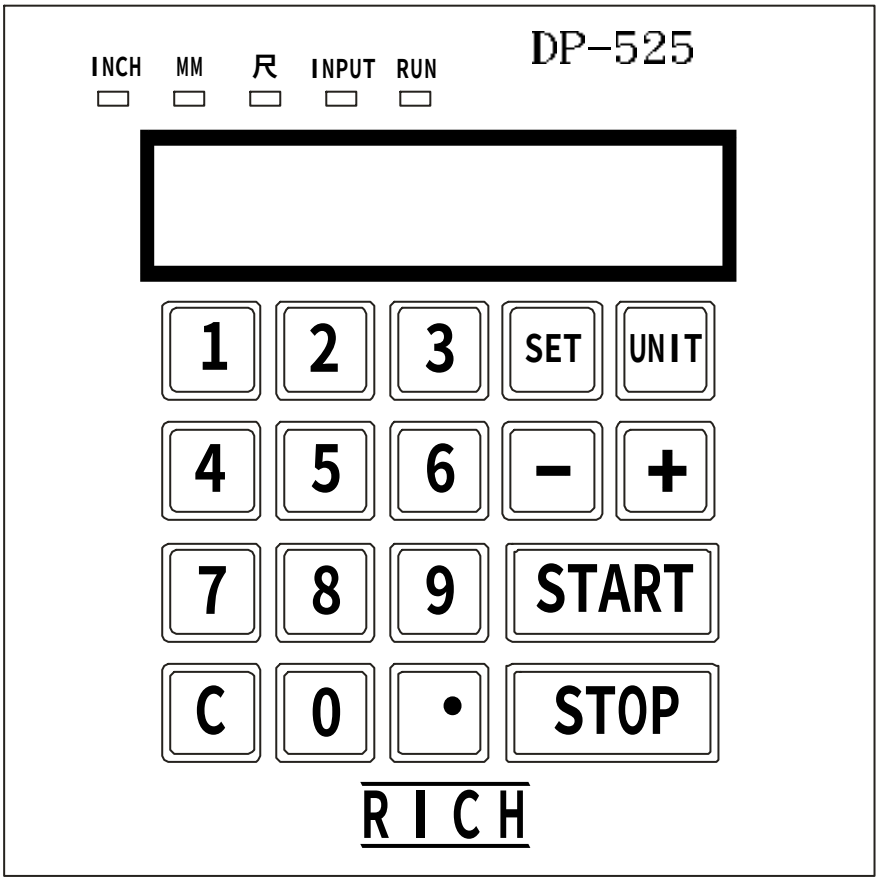
DP 525

OPERATION INSTRUCTIONS/USER MANUAL



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1.SPECIFICATIONS

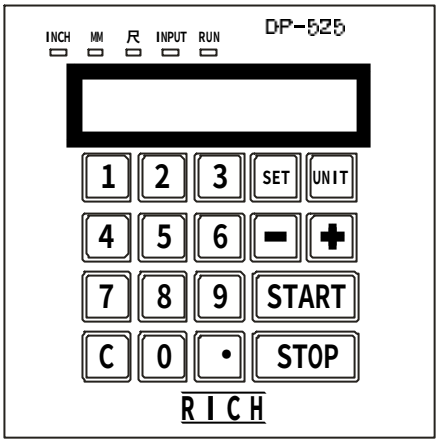
Please obey this regulation !

1.Power Input: AC(0V-110V-220V)50/60HZ ± 20%
2.Signal Input:StandardENCODERABPhaseSignal(DC12V).
3.TheWithstandingPressureofTheOutPutPanelPointOfTheRelay:AC(250V-3A).
4.SafetyLimitSwitch:Whenusingthiscontrolunit,thestrokesafetylimitswitchmustbeadopted.Please useNC,Cintheelectromagnetismon-offreturncircuittoprotectautomatically,orcascadewiththerelay R1,R2ofthiscontrolunit.(SeriousWarning)Tomakesurethesafetyofpeopleandmachineryoperation, the safety limitswitchmust beequipped.
5.Theelectricians andoperatorshave topaytheirattentionnottomakeanychangepersonallyontheabove mentioned4points(without theagreementofourtechnicians)otherwise,thecontrolunitis possibletobe ensurethesafetyofpeople,pleasecaution.

2.CHARACTERISTICS

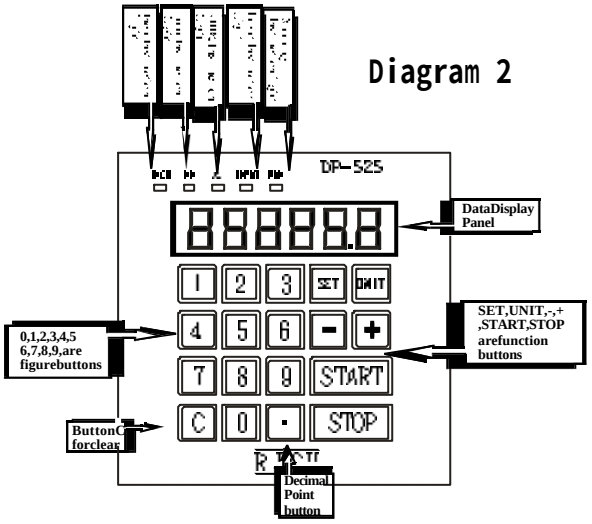
1.TheMicro-ComputerSingleChipis adoptedinthismachine.The stability and safetycanbeassuredunderlongtimetunning.
2.Eventhoughthepowervoltage isdifferentorthedriveconstructionis wornoutdaybydayandthechangeofreturncircuitcaneffect completely thefunctionofdimensionclamping.
3.TheParameterofthismachinecanbeset.
4.TheMagnificationcanbeset.
5.Thismachinecandisplay3differentunits ofdimensions,mm,INCH, 台尺 and canbetransitedimmediately.
6.ThethicknessDatacanbeset.
7.ThefiguresunderDecimalPointcanbe setseparately.

Diagram 1



3.PANEL DISPLAY AND DESCRIPTION OF BUTTON FUNCTIONS

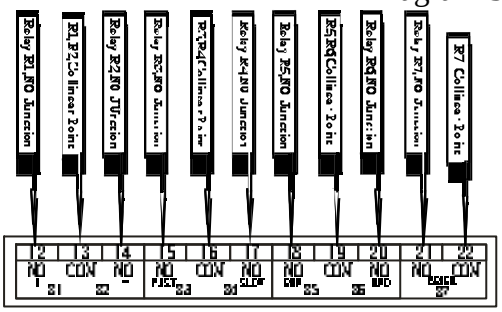
Diagram 2



1.Figurebuttonarefrom0to9
2.ButtonCisforclear.
3..isabuttonforsettingthedigitsatrightsideofDecimal Point.
4.SET is a buttonforsettingdata.
5.UNITisbuttonfortransitingdimensionunits.
6.-isformanualoperationtoincreasethefigure.
7.+isfor manual operationtoincreasethefigure.
8.START isbuttontostart.
9.STOPisabuttontostopandstopalloperations meanwhile.

4.DESCROPTION OF RELAY FUNCTION

Diagram 3

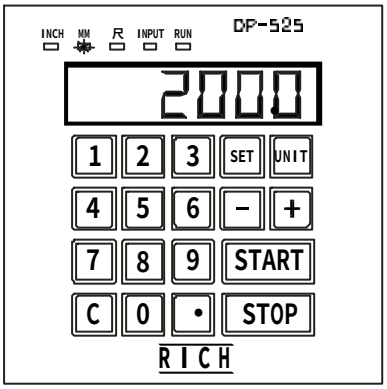

Relay R1,FWD Junction
R2,R3Colinear Point
Relay R2,REV Junction
Relay R3,REV Junction
R3,R4Collinear Point
Relay R4,REV Junction
Relay R5,FWD Junction
R5,R6Collinear Point
Relay R6,FWD Junction
Relay R7,FWD Junction
R7 Collinear Point
12 13 14 15 16 17 18 19 20 21 22
NO COM NO NO COM NO NO COM NO NO COM

1.R1meansdimensionincreasing.
2.R2meansdimensiondecreasing.
3.R3meansathighspeed.
4.R4meansatlowspeed.
5.R5meansunderrunning.
6.R6meansjobfinished.
7.R7meansbraking.
PS: ThenumbersandfunctionoftheRelaywillbe changed whenthemachinemodelisdifferent.

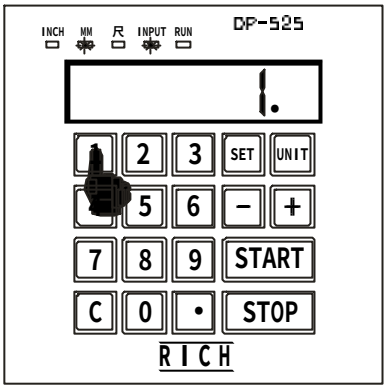
5.Operating Instruction For Correcting Data

1.In accordancewiththedimensionofthe actual material,press(SET)buttonand(0.)willshownonthe display.Usecorrectfigures andpress (0 to9)buttons,thenpressbutton(SET)for2-3seconds.Thedisplay will starttoflashandthenstopflashing.Finallythe figuresinput formerlywill beshownandcomplete correctingdata.Ifthetimeforpressingthebutton(SET)orinputincorrectfigures,thatmeanstheprevious input isineffective.Pleaseoperateagain. PS:Whencorrectingexistingdata,thebuttons(C),(.),(STOP) can beoperatedatthesametime.Pleaserefertothediagram 4,5&6.Ifthecurrentfigureshownonthecontrol unit is200.0andthecorrectonein100.0,thestepstooperateareasthefollowingdiagramsdemonstrated.

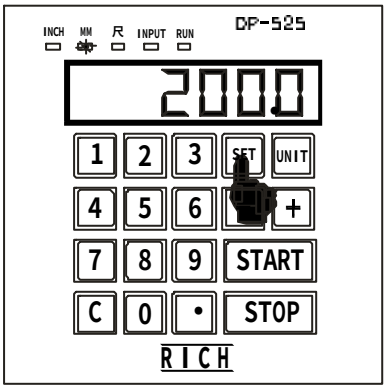
Diagram4



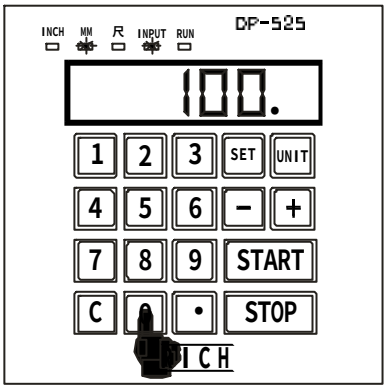
Current figure shownis200.0



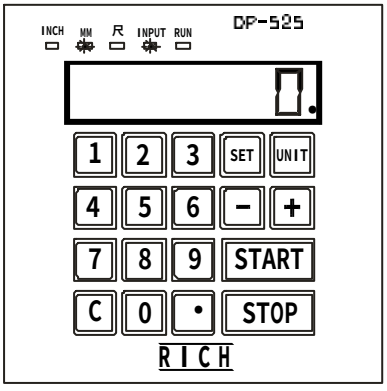
Step3:
Press button(1).



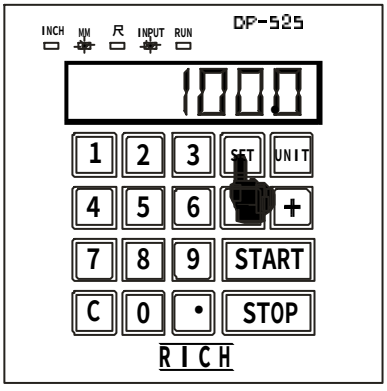
Step1:
pressbutton(SET).



Step4:
Press button(0) twice.



Step2:
Takeyourfingeraway fromthebutton(SET), then(0)onlyis shownon thedisplay.

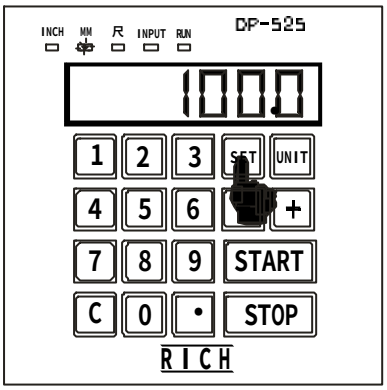


Step5:
Press button(SET) for2-3secondsand takeyourfinger away.Thefigure 100.0isshownon thedisplay.Now, thecorrecting existingdatais completed.

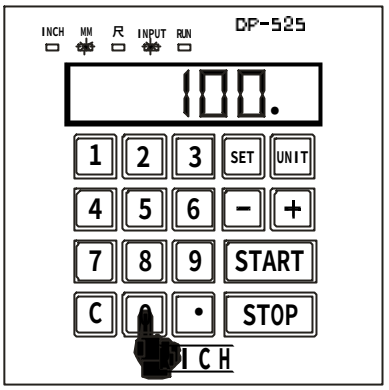
6.DESCRIPTION OF SETTING 10th DIGIT

1.Ifthedimensionof theactualmaterial is 100.2,whenchanging,pressbutton(SET) and (0.) willshownon thedisplay.Usecorrectfiguresandpress100andbutton(.).Afterthedecimalpointonthedisplaystartto flash,press button(2)andthenpressbutton(SET)for2-3seconds.Thefigure100.2willbeshownonthe display and input iscompleted.If thetimeforpressingthebutton(SET)orinputincorrectfigures,that meansthepreviousinputis ineffective.Pleaseoperateagain. PS: Thedecimalpointandthebuttons(C),(.) ,(STOP)canbeoperatedatthe sametime.Pleaserefertothediagram5&6. Ifthecurrentfigureshownon the figuretoreplaceis 100.2,thestepstooperateareasthefollowingdiagramsdemonstarted.

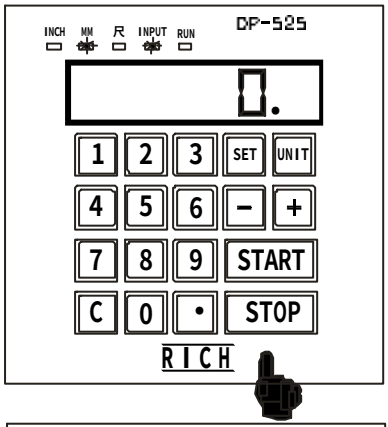
Diagram 5



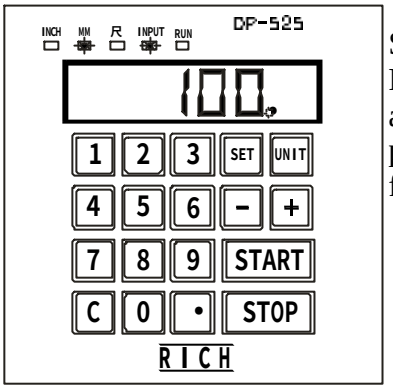
Step1: pressbutton(SET).



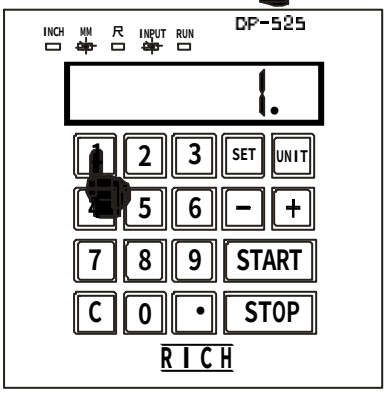
Step4: Pressbutton(0) twice.



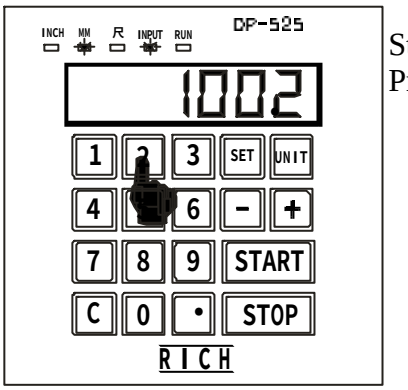
Step2: Takeyourfinger awayfromthebutton (SET),then(0.)only isshownonthe display.



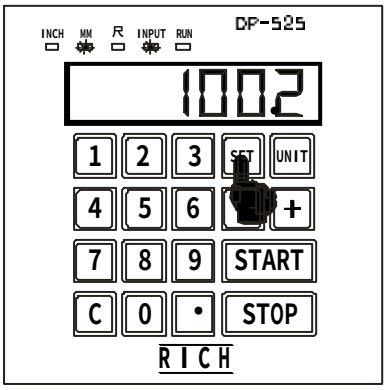
Step5: Press button(.) and thedecimal point startsto flash.



Step3: Pressbutton(1).



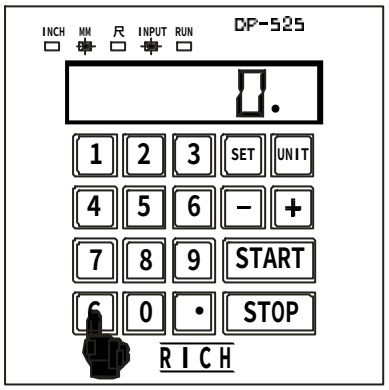
Step6: Press button(2).



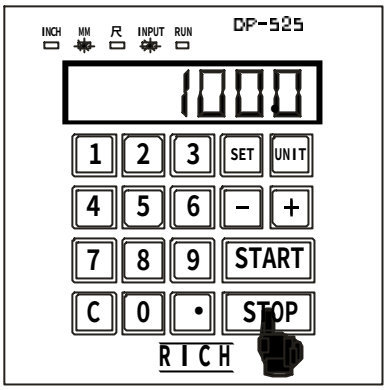
Step7: Pressbutton(SET) for2-3secondsand takeyourfinger away.Thefigure 100.2isshownon thedisplay.Now,the correctingexisting dataiscompleted.

PS:Decimal pointsettingandcorrecting existingdatacanbeoperatedatthe sametime.

Diagram 6



PS:Duringthe procedureof operation,press button(SET),the displayistobe bleared andthe figure0.isshown onit.



PS:Ifbutton(STOP) ispressedduringthe procedureofoperating, allaboveoperatingsteps willbeseotpedandreturn totheoriginalcondition.

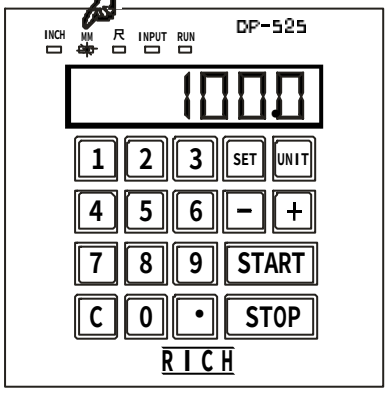
7.DIMENSION UNIT SELECTING AND DESCRIPTION OF CHANGE

1.Theuser can chooseINCH,mmor **台尺** in accordancewiththeircommonuse.This control unit can transitthedimensionunits swiftlybypressingbutton(UNIT).

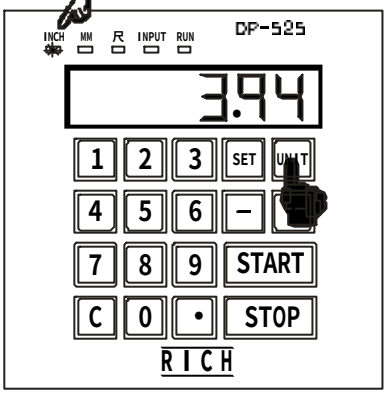
2.Ifthecurrentdimensionunitshownis(mm),theinstructionlightwillswitchtowardleftbypressing button(UNIT)whentransitingthedimensionunit.Users can choosetheir own commonuseddimension units.Theinstructionlightsswitchinleftcycle way asthediagrams shown.

Diagram7

Thecurrent dimensionuntishownis(mm)

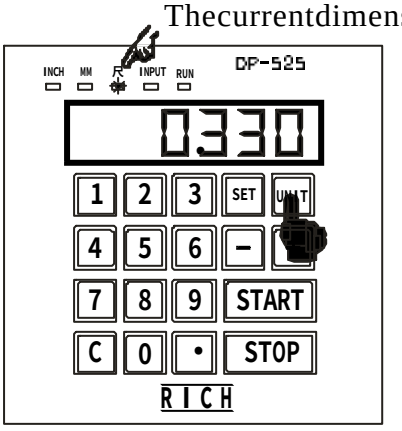


Thecurrentdimensionunit shownis(INCH).



Thedisplayshows automaticallyanewfigure onbasisofINCHunit.
Step1:
Pressbutton(UNIT).

Thecurrentdimensionunit shownis(**台尺**)



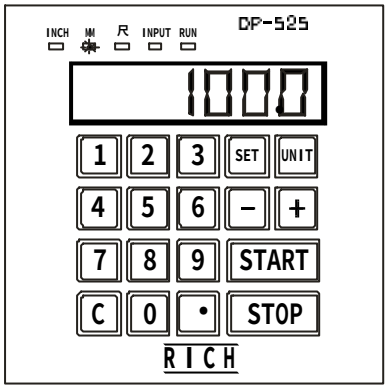
The display showsautomaticallya newfigure onbasis ofINCHunit.
Step2:
Pressbutton(UNIT)again.

PS: The display will only dot is lighting , IF controller is show (minus) range , It's incorrect , please reload correct dimension data.

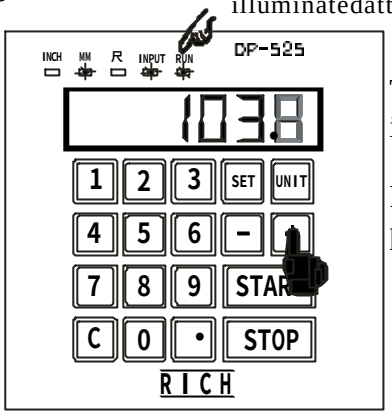
8.DESCRIPTION OF MANUAL OPERATING(+),(-)

1.Pressbutton(+),the figureshownonthedisplaywillincreaseautomaticallyathighestspeed.
2.Pressbutton(-),thefigureshownonthedisplaywilldecrease automatically athighestspeed.
PS: Thespeedofincreasingordecreasingthe figuresdependsonthespeedofmachinerunning.

Diagram 8



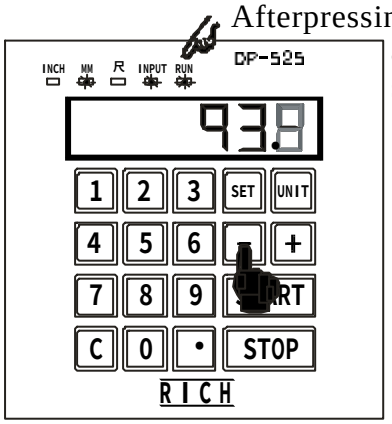
Thecurrent figureshownonthe displayis100.0.Pleaserefer tothefollowingsketchforthe changeofpressingbutton(+)or(-)



Afterpressingbutton(+),theinstruction lightofINPUTandRUNwillbecome illuminatedatthesametime.

Thefigureshownonthedisplay is increasing at highspeed.

Press button(+)and continueto press.



Afterpressingbutton(-),theinstructionlightsofINPUT andRUNwillbecomeilluminatedatthe sametime.

Thefigureshownonthedisplayisdecreasing at high speed.

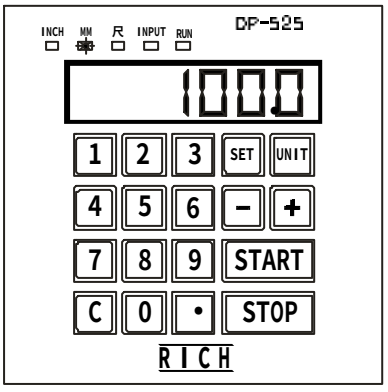
Pressbutton(-)andcontinuetopress.

9.DESCRIPTION OF AUTOMATIC START OPERATING

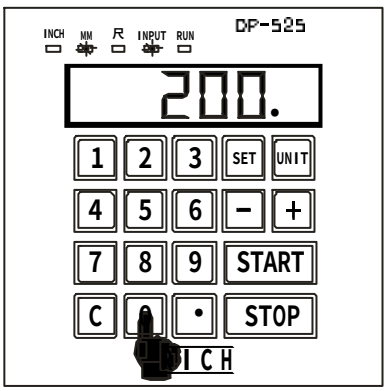
1.If thefigureshownonthiscontrolunitis100.0andweneedtoincreaseitto200.0pressbutton(SET) first,thedisplaywillshow0.Theninputthenewfigurewewanttoincreasetoandfinallypressbutton (START).Pleasenote,toinputthe10thdigit,pressbutton(.)shouldbepressedpriorto(START).After inputtingthe10thdigit,pressbutton(START)tocompleteit.

PS:DuringoperatingofINPUTorSTART,ifthebutton(STOP)ispressed,this control unit will stop runningimmediatelyandgobacktotheconditionofrepose.

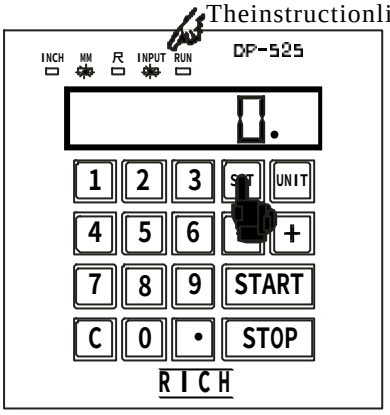
Diagram9



Thecurrentfigure showntothedisplay is100.0

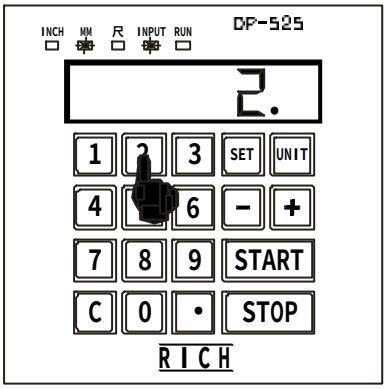


Step 3:
press button (0) twice, the display will show 200.

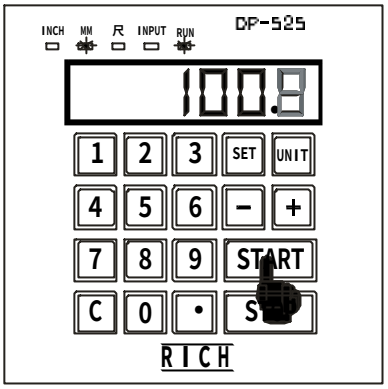


TheinstructionlighttoINPUbecomes illuminatedafterpressing button(SET)

Step1:
press button(SET), thedisplaywill show 0.



Step2:
press button(2), thedisplaywill show 2



Pressbutton(START),theinstruction lightofRUNbecomes illuminatedandthe instructionlightofINPUT.

Step4:
Pressbutton(START)again. Thiscontrolunitstartstorun andthefigureonthefigure onthedisplaychangesback to100.0andstarttoincrease.

PS:Ifit'snecessarytoinput 10thdigit,pleasepress button(.)priorto(START). Afterinputtingthe10thdigit, pressbutton(START)to completeit.Theprocedureto inputthedecimal,please refertothestep5&6of Diagram5.

Inordernottocauseanydangerbythe wrongdimensionofmachineryoperation, except electricians,it'sprohibitedto operateor makeanychange

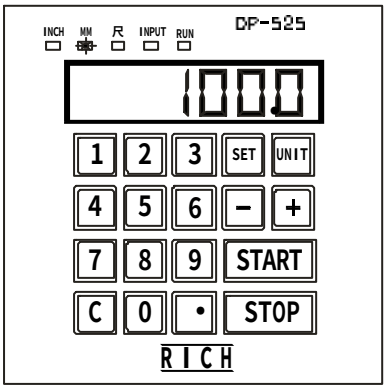
10.DESCRIPTION OF PARAMETER CALCULATION AND SETTING

1.Parameter,inaccordancewitheachsignalofENCODER,stands foractual dimension. To input suitable unit parameter,thedimensionunit must bemmandnotmorethan0.1mm.

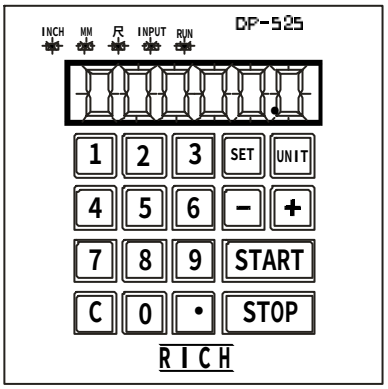
2.Thecalculationisshownasthefollowings:
Exp.1.10.0mmscrewstick,use200P/RENCODER10/20=0.05mm,theparameterinputshouldbe(500000).
Exp.2.1INCH=6pitches,use50P/RENCODER25.4/6/50=0.08466666mm,theparameter input shouldbe (846666).
Exp.3.6mm1pitch,use60P/RENCODER6/60=0.1mm,theparameterinputshouldbe(000000).

3.Inputthe calculatedparametertothiscontrolunittheparametercanbesetonlyonetimewhenmaking assembly.Thesettingmethodistoturnoffthepowerswitch,thenpressbutton(SET)andturnonthe powerswitchmeanwhile.Afterthe figureonthedisplaystartstoflash,thecalculatedparametercanbe inputatthistime.Exp.:Theparameteris000000,pressbutton(0)sittimesandthenpressthebutton(S ET).Pleasecontinuestopress thebutton(SET)untilthedisplaystopsflashing.

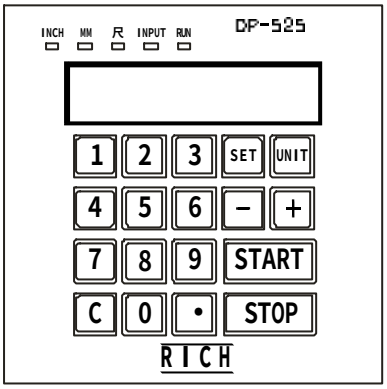
Diagram10



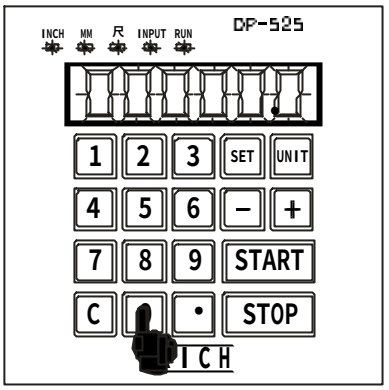
Thedisplayshows100.0



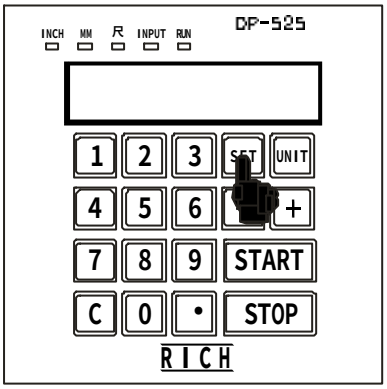
Step4:
Takeyourfinger away, thenthe parametercanbe input.



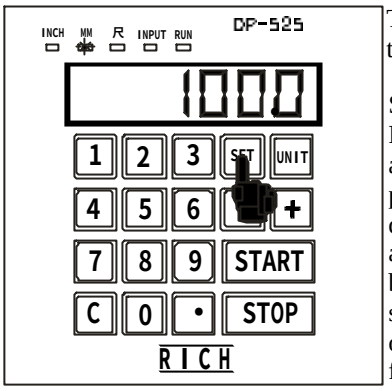
Step1:
Turnoffthepowerswitch andthefigureonthediwplay willdisappear.



The parameter shown on the display is 00000.0
Step5:
Forinstance,the parameteris(0000 0.0),pleasepress button(0)sixtimes.

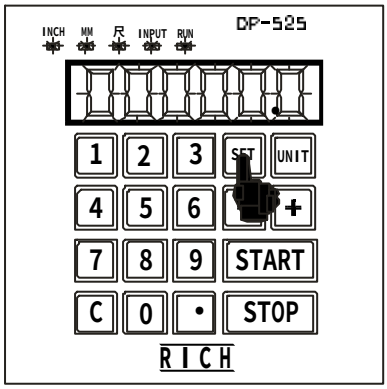


Step2:
Pressbutton(SET)and continuetopress.



Thefigureshownon thedisplayis100.0

Step6:
Pressbutton(SET) andcontinueto pressuntilthe displaystopsflashing andshowsthefigure before thepower switchwasturned off.Thentakeyour fingeraway,the inputoftheparameter iscompleted.



Step3:
Turnonthepowerswitch, thedisplaystarts to flash.

⚠ Inordernottocauseanydangerbythe wrongdimensionof machineryoperation, exceptelectricians,it'sprohibitedto operateormakeanychange

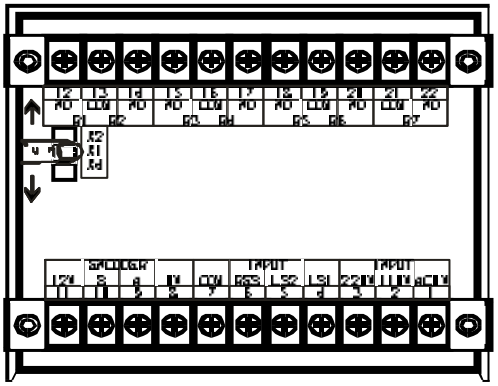
11.DESCRIPTION OF MAGNIFICATION SETTING

1.Thiscontrol unitcanmultiplythenumbersofENCODER'Ssignalone,twoorfourtimestoincreasethe resolution.
2.ThefunctionofX1,X2andX4canbeselectedbymovingtheswitchontherearofthiscontrolunit.
3.Toadoptthisfunction,thepowerswitchhastobeturnedoffandthenchoosetherequiredmagnification. Turnonthepowerswitch.Theoperationiscompletedaccordingly.

Diagram 11

MoveuptheswitchtoX2

MovedowntheswitchtoX4



12.FAULT SITUATION AND TROUBLE-GHOTING

Fault Situation	**SearchForFailure**	**Trouble-Shooting**
1.The display fails to show figures.	1.Checkiftheelectric pressureofthepower 220V orAC110V is normal.	Please re-input correct electric pressure
	2.Checkifthefuseisburnt out and fused tobebroken.	Replace a new 1A fuse.
	3.If theabovetwopointare checkedtobenormal,that meansthiscontrolunitis outoforder.	Send back to the supplier for repair.
2.The display does show, but the figures are abnormal.	1.Thefiguresshownane incorrect.	Correct dimensionofthecontrolunit inaccordance with theactualdimension.
	2.Theparameteris incorrect.	Calculate correct parameter and input again.
	3.Afterfinishingpoint 1 & 2,turnoffthepowerand turnonagain.	If it'sstillabnormal,pleasesendbacktothe supplierfor repair.
3.The display does show figures, but when the up-down motor operates, the figure fails to change in accordance with the change of the machine's dimension.	1.If theproximityswitchis usedandundernormal induction,theinstruction lightof theinduction switchwill beilluminated orputoutinaccordance withthetablemovesupor down.	If the instruction lights fail to be illuminated, please change the proximity switch.
	2.Ifthedistancebetweenthe inductionunitand induction sheetis more than1mm.	Adjuse the distance between the induction unit and induction sheet to be less than 1 mm.
	3.IfENCODERisused,checkif ENCODER runsinaccordance withthetablemovesupordown .	IftheaxleconnectorofENCODERandthetablegotoffor damaged,pleasereplaceanewoneorhaveitrepaired.
	4.CheckifphaseA.Biswiththe change ofDC12Vand0V,please measurewithWatt-hourmeter.	If there is no change on phase A.B, please replace ENCODER.
4.Travel dimension is incorrect.	Ifthecorrectionismadeat30mm ,butthedimensionat150mmisn't compliedwiththescale,butback to30mm,thedimensionis compliedwiththescale.	The parameter of the control unit isn't complied with the table, please correct the parameter.
5.The display only dot is lighting.	The digit reader is "minus" range.	Replace correct dimension data reference Ch.6.